

U.S. PATENT & TRADEMARK OFFICE  
AUG 6 8 2003  
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TRANSMITTAL LETTER  
(General - Patent Pending)

Docket No.  
DBS-38-A-1

In Re Application Of: PAUL M. DEFOURNY AND FEREIDOUN ABBASSIAN

Serial No.	Filing Date	Examiner	Group Art Unit
Not Yet Assigned	June 8, 2000	JONG-SUK (JAMES) LEE	3672

Title:

CONNECTION FOR RESILIENT APPLICATION OF TORQUE AND WEIGHT TO A DRILL BIT

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AUG 11 2003

OFFICE OF PETITIONS

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith is:

PETITION UNDER 37 C.F.R. 1.10 (E) TO CONSIDER CORRESPONDENCE FILED IN THE PATENT OFFICE  
ON THE USPS DEPOSIT DATE - 17 PAGES

in the above identified application.

- No additional fee is required.
- A check in the amount of \$130.00 is attached.
- The Director is hereby authorized to charge and credit Deposit Account No. as described below.
  - Charge the amount of
  - Credit any overpayment.
  - Charge any additional fee required.

  
Signature

Dated: AUGUST 6, 2003

CARLOS A. TORRES, REG NO. 24,264  
BROWNING BUSHMAN, P.C.  
5718 WESTHEIMER, SUITE 1800  
HOUSTON, TEXAS 77057  
TELEPHONE: (713) 266 5593  
FACSIMILE: (713) 266 5169

I certify that this document and fee is being deposited on 08/06/2003 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

  
Signature of Person Mailing Correspondence

MARTHA JEFFERS

Typed or Printed Name of Person Mailing Correspondence

CC: FILE



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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

§ Attorney Docket No.: DBS-38-A-1

Paul M. Defourny and  
Fereidoun Abbassian

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Serial No.: Not Yet Assigned

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Continuing Prosecution Application  
of SN 08/696,986

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Filed: June 8, 2000

§

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For: *Connection for Resilient Application  
of Torque and Weight to a Drill Bit*

Art Unit No.: 3672

Examiner: Jong-Suk (James) Lee

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AUG 11 2003

OFFICE OF PETITIONS

**PETITION UNDER 37 C.F.R. 1.10 (e)  
TO CONSIDER CORRESPONDENCE FILED  
IN THE PATENT OFFICE ON THE USPS DEPOSIT DATE**

Attention: Ms Nancy Johnson  
Office of Petitions  
Mail Stop Petition  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Va. 22313-1450

The correspondence for the above-identified continued prosecution application was timely and properly mailed to the U.S. Patent and Trademark Office on June 8, 2000. On August 5, 2003, following an inquiry to the pending applications division of the U.S. Patent and Trademark Office, it was discovered that the Office has no evidence of receipt of the correspondence.

Enclosed herewith are copies of the following materials evidencing the timely and proper mailing of the correspondence:

1. A copy, front and back, of a self-addressed postcard \*E77 addressed, on its front, to the undersigned and endorsed, on its back, with the receipt stamp of the Office showing a receipt date of June 8, 2000. The card lists enclosures of "Continued Prosecution Application

08/11/2003 AWONDAF1 00000011 08696986

01 FC:1460

130.00 OP

Request Transmittal", "Preliminary Amendment", "Check (\$900.00)", "File No. DBS-38-A", "Check No. 6437", "Date: June 8, 2000", and others.

2. A copy of Browning Bushman Check No. 6430 in the amount of \$900.00 in payment of the filing fee. The check, dated June 8, 2000, has been paid to the Office.

3. A copy of Express Mail "Customer Copy" mailing label of Express Mail No. EL366225679US. The Customer Copy of the mailing label shows a "date-in" of June 8, 2000.

4. A copy of the "Certificate Of Mailing By Express Mail" showing a "mailing date" of June 8, 2000 and carrying Express Mail mailing label No. EL366225679US.

5. A copy of Continued Prosecution Application Request Transmittal (3 pages). The transmittal was duly executed by the undersigned on the therein stated date of June 8, 2000.

6. A copy of the Preliminary Amendment (6 pages). The Preliminary Amendment was duly executed by the undersigned on the therein stated date of June 8, 2000.

The undersigned herein represents that:

(1) this Petition was filed promptly after the undersigned became aware that the Office has no evidence of receipt of the correspondence;

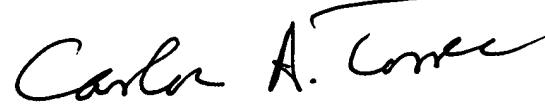
(2) the number of the "Express Mail" mailing label was placed on the above identified correspondence prior to the original mailing by "Express Mail";

(3) this Petition includes a copy of the originally deposited papers and fees that constitute the correspondence showing the number of the "Express Mail" mailing label thereon, copy of the return postcard receipt, and a copy of the "Express Mail" mailing label showing the "date-in",

Applicants are enclosing a check in the amount of \$130.00 in payment of the petition fee. It is respectfully submitted that the fee should be reimbursed upon granting of this Petition. Any required additional fee or any reimbursement may be assessed against, or deposited to, Deposit Account No. 02-4345.

In view of the foregoing submission, it is respectfully submitted that Applicants are entitled to a filing receipt and serial number for the above referenced continuing application with a filing date of June 8, 2000 and such action is earnestly solicited.

Respectfully submitted,



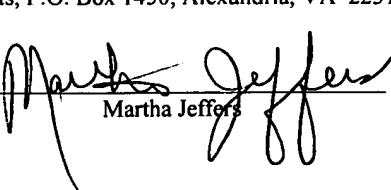
Carlos A. Torres,  
Attorney for Applicants  
Reg. No. 24,264

Date: August 6, 2003  
Browning Bushman, P.C.  
5718 Westheimer, Suite 1800  
Houston, Texas 77057  
(713) 266 5594  
(713) 266 5169

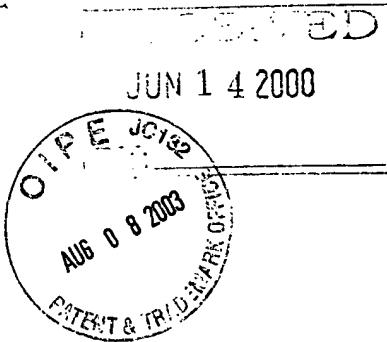
CERTIFICATE OF MAILING

I hereby certify that this correspondence and all referenced enclosures are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop: Petition; Attention: Ms. Nancy Johnson, Office of Petitions, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on August 6, 2003.

Signed:



Martha Jeffers



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OFFICE OF PETITIONS

Application of: Paul M. Defourny and Fereidoun Abbassian  
Serial No. 08/696,986  
Filed: 03/03/97

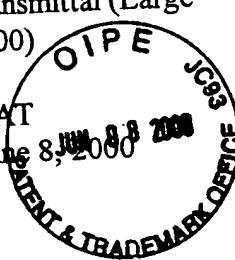
For: Connection for Resilient Application of Torque and  
Weight to a Drill Bit

Encl.: Continued Prosecution Application Request Transmittal (Large  
Entity), Preliminary Amendment, Check (\$900.00)

File No.: DBS-38-A  
Check No. 6430  
Card No.: \*E77

Signed:  
Date:  
Due:

CAT  
June 8, 2003



Carlos A. Torres  
BROWNING BUSHMAN  
5718 WESTHEIMER, SUITE 1800  
HOUSTON, TX 77057

“**અનુભૂતિ**”

A black line drawing of a coiled spring, showing its helical structure.

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OFFICE OF PETITIONS

Application of: Paul M. Defourny and Fereidoun Abbassian  
Serial No. 08/696,986  
Filed: 03/03/97

## For: Connection for Resilient Application of Torque and Weight to a Drill Bit

Encl.: Continued Prosecution Application Request Transmittal (Large Entity), Preliminary Amendment, Check (\$900.00)

File No.:	DBS-38-A	Signed:	CAT
Check No.:	6430	Date:	June 8, 2000
Card No.:	*E77	Due:	

6430

35-7281/3130  
BRANCH 82

DATE June 8, 2000

**ATTORNEYS AT LAW - A PROFESSIONAL CORPORATION**  
**BROWNING BUSHMAN**  
5718 WESTHEIMER, SUITE 1800 PH. 713-288-5593  
HOUSTON, TEXAS 77057

Houston, TX 77057 • 15-255-2555

PAY TO THE ORDER OF Assistant Commissioner For Patents

15

John

"000300" 11

8718 Westheimer, Suite 100  
Houston, Texas 77037  
Quicksale/Banc

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**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): Paul M. Defourny, et al.

Docket No.

DBS-38-A

Serial No.

08/696,986

Filing Date

03/03/97

Examiner

Jong-Suk (James) Lee

Group Art Unit

3672

Invention: Connection for Resilient Application of Torque and Weight to a Drill Bit

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AUG 11 2003

I hereby certify that the following correspondence:

OFFICE OF PETITIONS

**Preliminary Amendment and all related documentation***(Identify type of correspondence)*

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under  
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231

June 8, 2000*(Date)***Geri Field***(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)***EL366225679US***("Express Mail" Mailing Label Number)***EL366225679US**

Note: Each paper must have its own certificate of mailing.

Express Mail Label No. 15743

**CONTINUED PROSECUTION APPLICATION (CPA)  
REQUEST TRANSMITTAL (Large Entity)**

Submit an original, and a duplicate for fee processing.  
*Only for Continuation or Divisional Applications Under 37 CFR 1.53(d)*

Docket No.

DBS-38-A

**DUPLICATE** (Check box if applicable)

First Named Inventor

Examiner

Group/Art Unit

Paul M. Defourny, et al.

Jong-Suk (James) Lee

3672  
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Address to:

Assistant Commissioner for Patents  
Box CPA  
Washington, D.C. 20231

AUG 11 2003

OFFICE OF PETITIONS

This is a request for filing a  continuation, or  divisional application under 37 CFR 1.53(d), (continued prosecution application (CPA)) of prior application number 08/696,986 filed on March 3, 1997

and entitled:

**Connection for Resilient Application of Torque and Weight to a Drill Bit**

1.  Enter the unentered amendment previously filed on \_\_\_\_\_ under 37 CFR 1.116 in the prior nonprovisional application.
2.  A preliminary amendment is enclosed.
3.  This application is being filed by fewer than all the inventors named in the prior application, 37 CFR 1.53(d)(4).
  - a.  **DELETE** the following inventor(s) named in the prior nonprovisional application:
- b.  The inventor(s) to be deleted are set forth on a separate sheet attached hereto.
4.  A new power of attorney or authorization of agent is enclosed.
5.  An Information Disclosure Statement (IDS) is enclosed:
  - a.  PTO-1449
  - b.  Copies of IDS Citations
6.  The fee for this application is calculated as follows:

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	23	- 20 =	3	x \$18.00	\$54.00
Indep. Claims	5	- 3 =	2	x \$78.00	\$156.00
Multiple Dependent Claims (check if applicable)					\$0.00
				<b>BASIC FEE</b>	\$690.00
				<b>TOTAL FILING FEE</b>	\$900.00

**CONTINUED PROSECUTION APPLICATION (CPA) REQUEST TRANSMITTAL (Large Entity)**  
**(Only for Continuation or Divisional Applications Under 37 CFR 1.53(d))**

7.  The Commissioner is hereby authorized to credit overpayments or charge the following fees to Deposit Account No. 02-4345

fees required under 37 C.F.R. 1.16.  
 fees required under 37 C.F.R. 1.17.  
 fees required under 37 C.F.R. 1.18.

8.  A check in the amount of \$900.00 is enclosed.

9.  Also enclosed:

10.  The prior application's correspondence address will carry over to this CPA UNLESS a new correspondence address is provided below:

CONTINUED PROSECUTION APPLICATION (CPA) REQUEST TRANSMITTAL (Large Entity)  
(Only for Continuation or Divisional Applications Under 37 CFR 1.53(d))

NOTES

Submit an original, and a duplicate for fee processing.

**FILING QUALIFICATIONS:** The prior application must be a nonprovisional application that is either: (1) complete as defined by 37 C.F.R. 1.51(b), or (2) the national stage of an international application in compliance with 35 U.S.C. 371. A Notice will be placed on a patent issuing from a CPA, except for reissues and designs, to the effect that the patent issued on a CPA and is subject to the twenty-year patent term provisions of 35 USC 154(a)(2). Therefore, the prior application of a CPA may have been filed before, on or after June 8, 1995.

**C-I-P NOT PERMITTED:** A continuation-in-part application cannot be filed as a CPA under 37 C.F.R. 1.53(d), but must be filed under 37 C.F.R. 1.53(b).

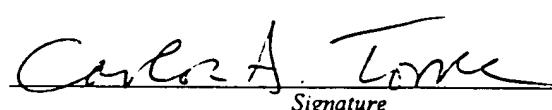
**EXPRESS ABANDONMENT OF PRIOR APPLICATION:** The filing of this CPA is a request to expressly abandon the prior application as of the filing date of the request for a CPA. 37 C.F.R. 1.53(b) must be used to file a continuation, divisional or continuation-in-part of an application that is not to be abandoned.

**ACCESS TO PRIOR APPLICATION:** The filing of this CPA will be construed to include a waiver of confidentiality by the Applicant under 35 U.S.C. 122 to the extent that any member of the public who is entitled under the provisions of 37 C.F.R. 1.14 to access to, copies of, or information concerning, the prior application may be given similar access to, copies of, or similar information concerning, the other application or application in the file jacket.

**35 U.S.C. 120 STATEMENT:** In a CPA, no reference to the prior application is needed in the first sentence of the specification and none should be submitted. If a sentence referencing the prior application is submitted, it will not be entered. A request for a CPA is the specific reference required by 35 U.S.C. 120 and to every application assigned the application number identified in such request, 37 C.F.R. 1.78(a).

Dated: June 8, 2000

Browning Bushman  
5718 Westheimer, Suite 1800  
Houston, Texas 77057  
Tel. (713) 266-5593  
Fax. (713) 266-5169

  
Signature

Carlos A. Torres

Typed or printed name

24,264

Registration Number (if applicable)

Inventor(s)  
 Assignee of complete interest  
 Attorney or agent of record

cc:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: § Attorney Docket No.: DBS-38-A  
Paul M. Defourny and Fereidoun Abbassian §  
Serial No.: 08/696,986 §  
Filed: March 3, 1997 § Art Unit No.: 3672  
For: *Connection for Resilient* §  
*Application of Torque and* §  
*Weight to a Drill Bit* § Examiner: Jong-Suk (James) Lee

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OFFICE OF PETITIONS

**PRELIMINARY AMENDMENT**

Box CPA  
Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

Please cancel all claims in the parent U.S. Patent Application Serial No. 08/696,986 and substitute therefore the following claims 93-115.

**In the Claims**

93. An apparatus for use in a drill string and drill bit assembly, comprising:  
a first member for attachment to the drill string;  
a second member comprising a drilling member, and  
a resiliently deformable spacer intermediate said first and second member for transmitting torque and weight between said first and second member, said spacer disposed between said first and second members so as to be compressed to allow tilting of or lateral movement of said first member relative to said second member under an applied load to enable more stable operation of the drilling member.

94. The apparatus as defined in Claim 93, wherein the first member is a drive shank of a drill bit and the second member is a drill bit body.

95. The apparatus as defined in Claim 93, wherein said first member is a drill bit body and the second member is comprised of at least one drill cutter movably mounted on the drill bit body.

96. The apparatus as defined in Claim 93, further comprising:  
a non-resilient transfer member for transferring torque and weight from the first member through the spacer to the second member.

97. The apparatus as defined in Claim 96, wherein the transfer member includes at least one elongate member passing through the second member and engaging at least one recess in the first member.

98. The apparatus as defined in Claim 96, wherein the transfer member includes a plurality of recesses in one of the first and second members for engaging corresponding gear components in the other of the first and second members.

99. The apparatus as defined in Claim 98, wherein the transfer member includes a threaded locking ring surrounding the first member and engaging threads on the second member.

100. The apparatus as defined in Claim 93, wherein the spacer includes an elastomeric spacer extending between at least part of the first member and the second member.

101. The apparatus as defined in Claim 100, wherein the elastomeric spacer comprises a hydrogenated nitrile rubber having a Shore A hardness of at least 80.

102. The apparatus as defined in Claim 100, wherein the elastomeric spacer comprises a layered body having at least one elastomeric material layer and at least one metal layer.

103. The apparatus as defined in Claim 93, wherein the resilient spacer comprises a hollow body containing a compressible fluid.

104. The apparatus as defined in Claim 103, wherein the hollow body transfers torque between the first member and the second member.

105. The apparatus as defined in Claim 93, further comprising:  
each of the first and second members having cooperating passageways therein; and  
a compressible seal for sealing engagement with the first member and the second member  
to prevent escape of fluid from the passageways in the first member and the second member.

106. The apparatus as defined in Claim 105, further comprising:  
a flexible pipe providing fluid communication between the passageways in the first member  
and the second member.

107. The apparatus as defined in Claim 94, further comprising at least one cutter  
movably mounted on the drill bit body.

108. The apparatus as defined in Claim 107, wherein the cutter is adhered to the drill bit body by an elastomeric spacer.

109. An assembly for incorporating along a drill string, comprising:  
a first member including a drill string;  
a second member including a drill member;  
a transfer member for transmitting weight and torque between the first member and the second member through a resilient spacer, said transfer member extending between the first member and the second member permitting the first member to tilt with respect to the second member, and wherein the second member is connected to the first member in a free-floating relationship, allowing the second member to tilt and move laterally with respect to the first member under an applied load to the drill string.

110. The assembly as defined in Claim 109, wherein the transfer member includes a series of radial teeth on the first member that loosely engage corresponding recesses in the second member, and wherein radial outer surfaces on the teeth and opposed base surfaces of the recesses are configured to allowing tilting of the first member with respect to the second member.

111. The assembly as defined in Claim 110, wherein the second member is formed with a connecting means for attaching thereto of a drill bit.

112. An apparatus for simulating drilling, comprising:  
at least one rigid rotatable body;

a drill bit for contacting a simulated bottom hole surface and connected to the rigid rotatable body;

a rotation member for rotating the rigid rotatable body and the drill bit; and

a flexible connector separating at least one of a rigid rotatable body and the drill bit and the rotatable member and the drill bit.

113. An apparatus for use in a drill string and drill bit assembly, comprising:

a first member for attachment to the drill string;

a second member for attachment to at least one drilling member;

a resiliently deformable connecting member between the first member and the second member for allowing tilting the first member with respect to the second member while transmitting torque and weight from the first member to the second member, the second member being connected by the connecting member to the first member in a free-floating relationship, thereby allowing the second member to tilt and move laterally with respect to the first member in response to reaction forces experienced during use of a drill bit and wherein the connecting member includes an elastomeric spacer extending between at least part of the first member and the second member and wherein the elastomeric spacer comprises a layered body having at least one elastomeric material layer and at least one metal layer.

114. An apparatus for use in a drill string and drill bit assembly, comprising:

a first member for attachment to the drill string;

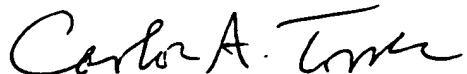
a second member for attachment to at least one drilling member;

a resiliently deformable connecting member between the first member and the second member for allowing tilting the first member with respect to the second member while transmitting

torque and weight from the first member to the second member, the second member being connected by the connecting member to the first member in a free-floating relationship, thereby allowing the second member to tilt and move laterally with respect to the first member in response to reaction forces experienced during use of a drill bit and wherein the connecting member comprises a hollow body containing a compressible fluid.

115. The apparatus as defined in Claim 114 wherein the hollow body transfers torque between the first member and the second member.

Respectfully submitted,



Carlos A. Torres  
Reg. No. 24,264

Date: June 8, 2000  
Browning Bushman  
5718 Westheimer, Suite 1800  
Houston, Texas 77057  
Tel.: (713) 266-5593  
Fax: (713) 266-5169

**CERTIFICATE OF MAILING**

I, Geri Field, hereby certify that this correspondence and all referenced enclosures are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Box CPA, Assistant Commissioner For Patents, Washington, DC 20231 on June 8, 2000.

